

20-8562



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

POSITIVE RECALL
EFFECTIVE 20/08/23 **AUTH** SLD
RELEASED PD **DATE** 20.9.21

649.4811

Job Sheet 212475



Part No: 649.4811

Job Qty: 4 pcs

Part Name: Clip



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 8/25/20

Job Tracking No:

Due Date: 9/14/20

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: 649.4800 REV.E IPP REV:A 12.11.01 NEW ISSUE DD VERF:JLM IPP REV:B 17.10.18 AS PER DWG REV.D
DD VERF:JFS IPP REV:C 18.03.14 AS PER DWG REV.E DD VERF:JFS

Ship Via:

REV. A

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
110	Waterjet - Flow - 1	4 pcs		8/29/20	0.17	0.05	Waterjet - Flow		on 20/08/20
120	QC 2	4 pcs		8/29/20	0.00	0.00	QC 2 - 1		
							QC 2 - 12		
							QC 2 - 14		
							QC 2 - 17		
							QC 2 - 19		
							QC 2 - 2		
							QC 2 - 20		
							QC 2 - 22		
							QC 2 - 23		
							QC 2 - 25		
							QC 2 - 32		
							QC 2 - 33		
							QC 2 - 35		
							QC 2 - 39		
							QC 2 - 4		
							QC 2 - 40		
							QC 2 - 44		
							QC 2 - 45		
							QC 2 - 48		on 20/08/20
							QC 2 - 49		
							QC 2 - 50		
							QC 2 - 51		
							QC 2 - 52		
							QC 2 - 57		
							QC 2 - 62		
							QC 2 - 63		
							QC 2 - 8		
							QC 2 - 66		
							QC 2 - 64		

8/25/2020

[Dart Hawkesbury] Job Sheet - Lajeunesse, Marie

130 QC 8	4 pcs	8/29/20	0.00 0.00	QC 2 - 65	
				QC 2 - 5	
				QC 2 - 71	
				QC 2 - 73	
				QC 2 - 69	
				QC 2 - 76	
				QC 2 - 86	
				QC 2 - 83	
				QC 8 - 12	
				QC 8 - 14	
				QC 8 - 17	
				QC 8 - 20	
				QC 8 - 25	
				QC 8 - 3	
				QC 8 - 32	
				QC 8 - 33	
				QC 8 - 35	
				QC 8 - 39	
				QC 8 - 4	
				QC 8 - 44	
				QC 8 - 45	
				QC 8 - 49	
				QC 8 - 58	
				QC 8 - 8	
				QC 8 - 9	
				QC 8 - 68	
				QC 8 - 67	
				QC 8 - 1 (A)	
				QC 8 - 47	
				QC 8 - 40	AUG 27 2020
				QC 8 - 52	DAS 40 19
				QC 8 - 23	
				QC 8 - 57	
				QC 8 - 76	
				QC 8 - 61	
				QC 8 - 66	
				QC 8 - 73	
				QC 8 - 82	
140 Small Fab - Brake NC - B4B	4 pcs	8/31/20	0.25 0.10	Small Fab - Brake - 1 - B4B	
				Small Fab - Brake - 2 - B4B	
				Small Fab - Brake - 3 - B4B	SEP 02 2020
150 QC 5	4 pcs	8/31/20	0.00 0.00	QC 5 - 10	
				QC 5 - 12	
				QC 5 - 17	
				QC 5 - 18	
				QC 5 - 19	
				QC 5 - 22	
				QC 5 - 24	
				QC 5 - 3	DAS 81 9-89
				QC 5 - 43	
				QC 5 - 49	SEP 03 2020
				QC 5 - 51	
				QC 5 - 58	
				QC 5 - 68	
				QC 5 - 9	
				QC 5 - 50	
				QC 5 - 30	

Plex 8/25/20 7:26 AM Dart.lajeunesse.marie

				QC 5 - 40	
				QC 5 - 61	
				QC 5 - 81	
				QC 5 - 82	
160 Outsource - 4 - Anodize	4 pcs	9/14/20		ATG001-VC	10
					<i>2020-09-03</i>
170 Packaging 2-1 - Receive - B4B	4 pcs	9/14/20	0.00 0.00	Packaging 2 - 1 - B4B	
				Packaging 2 - 2 - B4B	
				Packaging 2 - 3 - B4B	
				Packaging 2 - 5 - B4B	<i>SEP 17 2020</i>
				Packaging 2 - 4 - B4B	
				Packaging 2 - 6 - B4B	
				Packaging 2 - 7 - B4B	
				Packaging 2 - 8 - B4B	
				Packaging 2 - 9 - B4B	
				Packaging 2 - 10 - B4B	
				Packaging 2 - 11 - B4B	
				Packaging 2 - 12 - B4B	
				Packaging 2 - 13 - B4B	
				Packaging 2 - 14 - B4B	
				Packaging 2 - 15 - B4B	
				Packaging 2 - 16 - B4B	
				Packaging 2 - 17 - B4B	
				Packaging 2 - 18 - B4B	
				Packaging 2 - 19 - B4B	
				Packaging 2 - 20 - B4B	
				Packaging 2 - 21 - B4B	
				Packaging 2 - 22 - B4B	
				Packaging 2 - 23 - B4B	
				Packaging 2 - 24 - B4B	
				Packaging 2 - 25 - B4B	
				Packaging 2 - 26 - B4B	
				Packaging 2 - 27 - B4B	
				Packaging 2 - 28 - B4B	
				Packaging 2 - 29 - B4B	
				Packaging 2 - 30 - B4B	
				Packaging 2 - 31 - B4B	
				Packaging 2 - 32 - B4B	
				Packaging 2 - 33 - B4B	
				Packaging 2 - 34 - B4B	
				Packaging 2 - 35 - B4B	
				Packaging 2 - 36 - B4B	
				Packaging 2 - 37 - B4B	
180 QC 6	4 pcs	9/14/20	0.00 0.00	QC 6 - 9	
				QC 6 - 68	
				QC 6 - 61	
				QC 6 - 40	<i>DAS 31</i>
				QC 6 - 81	<i>SEP 21 2020</i>
				QC 6 - 82	<i>9-89</i>
210 Packaging 3-1 - Stock - B4B	4 pcs	9/14/20	0.00 0.00	Packaging 3 - 1 - B4B	
				Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	<i>DAS 28</i>
				Packaging 3 - 5 - B4B	<i>9-89</i>
				Packaging 3 - 6 - B4B	<i>SEP 22 2020</i>
				Packaging 3 - 7 - B4B	
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	



*Please See Pat-0 for
Positive Recall signed off
and Eng signed off by Eng*

				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
				Packaging 3 - 37 - B4B	
220 QC 21 - SA	4 pcs	9/14/20	0.00 0.00	QC 21 - SA - 21	DAS
				QC 21 - SA - 70	21
				QC 21 - SA - 9	9-88
				QC 21 - SA - 77	
Part Op 110 - 1-Cut as per Dwg Dwg Rev: <u>A</u> Prog Rev: <u>A</u> 2-Deburr if necessary Descriptions: 120 - (QC2- Inspect parts off machine FAI/FAIB) 130 - (QC8- Inspect parts - second check) 140 - (Form as per dwg) 150 - (QC5- Inspect part completeness to step on W/O) 160 - Issue P/O: <u>47021</u> AS PER MPP-172 SECTION 2.1, HARD ANODIZE COLOR BLACK, PER IAW MIL-A-8625 TYPE 3 CLASS 2 AS PER MPP-172 SECTION 4.2, PRIME AS PER IAW MIL-PRF-23377 TYPE 1 CLASS N Certification of Conformity is required 170 - (Receive & Inspect for Damage & Mat'l Certs) 180 - (QC6- All purchased or subcontracted products) 210 - (Identify as per dwg & Stock Location: _____), ***IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV*** 220 - (QC21- Final Inspection - Work Order Release)					
Job BOM					
Part / Item	Component Name	Quantity	Operation	Container	
M2024T3S.063	2024-T3 .063 Sheet	.2720 sf (.068 ea)	110-Waterjet - Flow - 1	S2110341 S252405	
Job Allocations					
Operation	Component Part	Required	Inventory	Allocated	
110-Waterjet - Flow - 1	M2024T3S.063	0	133	0	
Part Specifications					
Specifications could not be found.					

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DART AEROSPACE LTD	Work Order:	212475
Description: Clip	Part Number:	649.4811
Inspection Dwg: 649.4800 Rev: A		Page 1 of 1

[illegible]

Measured by: <i>on</i>			Audited by: <i>40</i>			Preliminary Approval:		
Date: <i>20/08/2020</i>			Date: <i>2-8-20</i>			Date:		

Rev	Date	Change	Revised by	Approved
A	12.11.26	New Issue	<i>KJ</i>	<i>MA</i>

Steven Drouin

From: Jacob Becker
Sent: Tuesday, August 25, 2020 1:54 PM
To: Steven Drouin
Cc: David Shepherd; Marc Bellavance
Subject: RE: Production request

Due to the circumstances related to a difference in windshield installation (screw in versus riveted design), it is acceptable to produce revision C for this customer so they receive the correct hardware and the correct components compatible with the older windshield design.

Regards,

JACOB BECKER
Lead Sustaining Engineer

DART AEROSPACE
T 1 760 509-1639
M 1 760 691-9108

From: Steven Drouin <sdrouin@dartaero.com>
Sent: Tuesday, August 25, 2020 9:09 AM
To: Jacob Becker <jbecker@dartaero.com>
Subject: Production request

Hi Jacob

Production would want to make the following parts to a old rev to the following items.

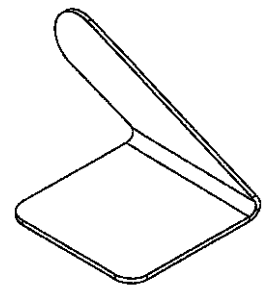
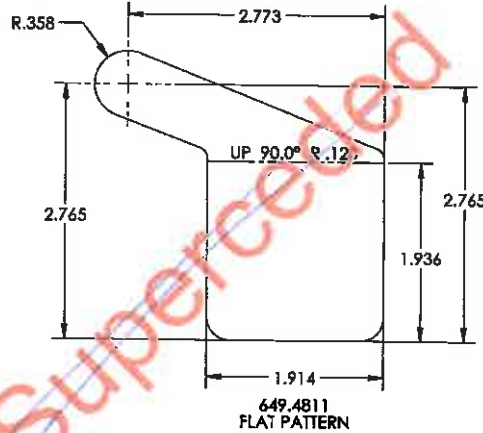
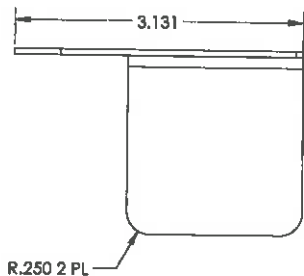
649.5010 REV. C , and currently at REV. D in Approved
649.5212 REV. A and currently at Rev. C in Approved
649.4701 REV. C and currently at Rev F in Approved
649.4811 REV. A and Currently at rev E in Approved

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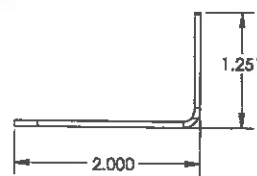
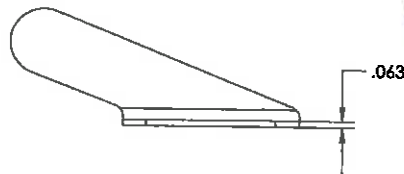
NOTES: UNLESS OTHERWISE SPECIFIED

- 1 MATERIAL: ALUMINUM 2024-T3 PER AMS-QQ-A-250/4
- 2 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK;
PRETREAT PR-148 ADHESION PROMOTER, PRIME IAW MIL-P-23377.1, TYPE I, CLASS N
- 3 DEBURR AND BREAK ALL SHARP EDGES
- 4 IDENTIFY IAW MPP-120. LASER ETCH P/N AND REVISION 12PT. CENTURY GOTHIC.
- 5 PART DIMENSIONS CONTROLLED BY CAD MODEL: FILE NAME: 649.4814 DOUBLER.SLDPRG
- 6 INSPECTION DIMENSIONS SHOWN WITH FINISH APPROX. 3-5 MIL MAX PER FACE.

REV.	DESCRIPTION	DATE	APPROVED
1	LAST PRELIMINARY REVISION	1/20/11	P. BLANCO
2	FINAL DESIGN	04/14/11	P. BLANCO
3	INCORPORATING REVISIONS	04/14/11	P. BLANCO



649.4811



649.4811
FLAT PATTERN

QTY	PART #	DESCRIPTION	MATL	SPEC.
7	649.4816	DOUBLER	AL	2
6	649.4815	SHIM	AL	2
5	649.4814	DOUBLER	AL	2
4	649.4813	SHIM	AL	2
3	649.4812	SHIM	AL	2
2	649.4811	CLIP	AL	2
1		DELETED		

APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA 92056-3512 (760)724-5300 SHEETMETAL 649.4800 SCALE NONE SHEET 1 OF 3	ORIGINAL DATE: 1/20/11 DESIGNED BY: P. BLANCO DRAWN BY: P. BLANCO CHECKED BY: P. BLANCO APPROVED BY: P. BLANCO DATE: 07/14/11 SCALE: NONE
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see email
~



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB047021



Supplier: ATG001-VC
A.T.G. Industries Inc
760 INDUSTRIELLE STREET
ROCKLAND
ON
K4K 1T2 Canada
Phone: 613-446-4544
Fax: 613-446-4556

Attention: Lalande, Marc-Andre

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB047021

PO Date: 9/3/20

Due Date: 9/18/20

Purchase Order

Revision:

Revision Date:

Issued By: Guerin, Kimberley
Phone: 613-632-5200 Ext: 298
kguerin@dartaero.com

Via: Ground

Pymt Terms: Net 60

Freight Terms:

Special Comments:

Items

Line Item	Job	Part	Drawing	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	211270	D1038-58B	D1038 Rev B	Avionics Fastener Rail : Various STC's Issue P/O: Black Anodize as per Dwg D1038 and QSI 017 4.1.10 Anodize per MIL-A-8625F Type I or IB or IC or II or IIB Class 2, Type III Class 2	Firmed X40	-	9/18/20	40 pcs	0 pcs	40 pcs	\$4.89/pcs	\$195.60
2	212428	649.5011	649.5000 Rev D	Deflector : Various STC's (Outsource process- Anodize per QSI017 4.1.10.1) Issue P/O to ATG: AS PER MPP-172 SECTION 2.1, HARD ANODIZE COLOR BLACK, PER IAW MIL-A-8625 TYPE 3 CLASS 2 AS PER MPP-172 SECTION 4.2, PRIME AS PER IAW MIL-PRF-23377 TYPE 1 CLASS N Certification of Conformity is required	Firmed	-	9/10/20	8 pcs	0 pcs	8 pcs	\$12.14/pcs	\$97.12



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB047021



Items

Line Item	Job	Part	Drawing	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
3	212429	649.5214	649.5200 Rev C	Bracket Issue P/O to ATG: AS PER MPP-172 SECTION 2.1, HARD ANODIZE COLOR BLACK, PER IAW MIL-A-8625 TYPE 3 CLASS 2 AS PER MPP-172 SECTION 4.2, PRIME AS PER IAW MIL-PRF-23377 TYPE 1 CLASS N	Firmed X10	-	9/10/20	10 pcs	0 pcs	10 pcs	\$10.64/pcs	\$106.40
									SEP 17 2020			1/2
4	212435	649.4813	649.4800 Rev E	Shim : Various STC's Outsource4 (Outsource process-Anodize per QSI017 4.1.10.1) ISSUE P/O: As Per MPP-172 Section 2.1, Hard Anodize IAW MIL-A- 8625, Type III, Class 2, Color Black As Per MPP-172 Section 4.2 Prime IAW MIL-P- 23377J Type1 Class N	Firmed X10	-	9/10/20	10 pcs	0 pcs	10 pcs	\$7.89/pcs	\$78.90
									SEP 17 2020			1/2
5	212182	647.1512	647.1500 Rev E	Breakaway Tip : Various STC's (Outsource process- Anodize per QSI017 4.1.10.1) Issue P/O to ATG : 1- Black Anodize as per Dwg 647.1500 2- PRIME AS PER DWG, SEE NOTE #2 Certification of Comformity is required	Firmed	-	9/10/20	4 pcs	0 pcs	4 pcs	\$12.34/pcs	\$49.36



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB047021



Items

Line Item	Job	Part	Drawing	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
6	212475	649.4811	649.4800 Rev E	Clip : Various STC's Issue P/O: AS PER MPP-172 SECTION 2.1, HARD ANODIZE COLOR BLACK, PER IAW MIL-A-8625 TYPE 3 CLASS 2 AS PER MPP-172 SECTION 4.2, PRIME AS PER IAW MIL-PRF-23377 TYPE 1 CLASS N Certification of Conformity is required	Firmed <i>X4</i>	-	9/10/20	4 pcs	0 pcs	4 pcs	\$11.24/pcs	\$44.96
Grand Total:												\$572.34

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Please ensure to send the related invoice to hby_ap@dartaero.com.

Plex 9/9/20 4:41 PM Dart.Guerin.Kimberley



A.T.G. Industries Inc.
760 Industrielle Street
Rockland, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Pack List

Number: 920829

Date: 16-Sep-20

Ship To

Kimberley Guerin
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via	
		ATG Delivery	
Quantity	Description		
	Please reference this document's Pack List number on all correspondences regarding this shipment. If you have any questions, please contact us.		
10 ea	Part: 649.5214 Bracket Hard Black Anodize per MIL-A-8625F, Type III, Class2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Batch/Lot#: 5286641 Job: 28085 PO: POHB047021		Rev: C Expiry Date: 5/16/22 Line: 3



A.T.G. Industries Inc.
760 Industrielle Street
Rockland, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 920829

Date: 16-Sep-20

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

Kimberley Guerin
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via	
		ATG Delivery	
Quantity	Description		
	CERTIFICATE OF CONFORMANCE A.T.G Industries Inc. certifies that all items in this shipment conform to the requirements. Date: <u>SEP 16 2020</u> Certified Signature: _____ Receiver Signature: _____ A.T.G Industries Inc. is AS9100 Registered and Nadcap Chemical Processing Accredited. Note: This Packing Slip may contain parts that have been PLATED. Items that are plated may be subject to natural tarnishing and it is suggested that they be inspected within 24 hours of receipt.		
Made in Canada.			

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SEP 22 2020



Route update only

NCR No. 20-8502

Job: <u>22475</u>		DISPOSITION		DEPARTMENT/PROCESS							
Part No. <u>649.4811</u>		Rework ☐ Scrap ☐ Use-as-is ☒		Skid-tube ☐ Machining ☐ Large Fab ☐		Cross tube ☐ Small Fab ☐ Finishing ☐		Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐		Engineering ☒ Water Jet ☐ Supplier ☐ Quality ☐	
Date: <u>20-9-21</u>		Sequence #: <u>110</u>		QTY Affected: <u>4</u>				MRB (QSI042)			
Description Work Order Deviation				Disposition				D 20-9-21			
Part made to Rev A. as per attach email				acceptable to make to Rev A				Completed By			
								on 20/08/21			
								Lead hand / Supervisor			
								D 20-9-21			
								QC / QA Coordinator			
								D 20-9-21			
Root Cause		FAULT CATEGORY									
Operator ☐		☐ Pressure/Forced		☐ Contamination		☐ Power Loss/Surge		☐ Positioned Wrong			
Manufacturing Process ☒		☐ Bending		☐ Misaligned/off center		☐ Folio/Program		☐ Outside Tolerance			
Equip/Tooling ☐		☐ Crushing		☐ BOM/Route		☐ Grain Direction		☐ Drawing			
Handling/Presservation ☐		☐ Cracks		☐ Broken/Damage/Defect		☐ Weld		☐ Finish			
Material ☐		☐ Crimp/Kink/Ripple/Wave/Twist		☐ Incomplete/Unclear Instructions		☐ Wrong Stock Pulled		☐ Part Lost/Missing			
Product Improvement ☐		☐ Marks/Chatter		☐ Drill Holes		☐ Out of Sequence		☐ Misread			
Process Improvement ☐		☐ Mislabeled		☒ Fit/Function		☐ Off-set/Set-up					
Human Factors ☐		Other/Details:									